

L 3778 66

ACCESSION NR: AT5007965

it was decided to achieve a system with twin frequency control: rough, according to the  $H$ -program, and precise, according to the information on the radial and phase position of the accelerated particle beam. The present report discusses the principal characteristics governing the achievement of a programmed FM-generator, a system of frequency control according to information of the position of the accelerated particle bunches, and accelerator installation. The programmed FM-generator consists of the usual elements: transducer of the derived magnetic field strength (inductive coil in the gap of the measuring electromagnet), electronic switch, tube integrator, modulator, FM-oscillator, phase manipulator, amplitude modulator of accelerating voltage, amplifier-distributor, and a system of cable contacts. To obtain energy increase per revolution of  $\Delta E = 166$  Kev for a rate of change of magnetic field strength of  $\dot{H} = 550$  oersteds/second and  $\phi_g = 30^\circ$ , provision is made for the application of 53 accelerator stations with rated input of 7 kilovolts and 6 kilowatts power. Provisions are also made for the short-duration increase of this voltage, 1.8 times up to the time of beam bunching (around 15 microseconds), and its slow decrease to about 2 times less toward the end of the acceleration cycle with the aim of preserving constant equilibrium phase during the fall in the magnetic field growth rate. The system of frequency control of the accelerating field according to the information on the accelerated particle beam position is similar in

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principle of operation to a system described by Yu. S. Ivanov and A. A. Kuz'min  
(*Pribory i tekhnika eksperimenta*, No. 4, 106, (1962)), which was intended to stabilize the position of the center of gravity of the beam according to radius and phase. Orig. art. has: 1 figure.

ASSOCIATION: Radiotekhnicheskiy institut AM SSSR (Radio Engineering Institute, AM SSSR)

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*m/c*  
Card 3/3

CHELYSHEV, N.A.; PERMYAKOV, V.M.; KAFTANOV, M.P.; ZAYKOV, M.A.; KAMINSKIY, D.M.;  
ZAKHARENKO, N.I.; PROKOP'YEV, A.V.

Characteristics of rolling rail steel ingots at the Kuznetsk  
blooming mill. Izv.vys.ucheb.zav.; chern.met. 8 no.8:94-101 '65.  
(MIRA 18:8)  
I. Sibirskiy metallurgicheskiy institut.

ZAYKOV, M.A.; TSELUYKOV, V.S.; KAMINSKIY, D.M.; DADOCHKIN, N.V.;  
MESHCHEYAKOV, P.A.; MARININ, P.G.; MIRENSKIY, M.L.; PROKOP'YEV,  
A.V.; OVCHINNIKOVA, R.F.; Prinimali uchastiye; BELYAVSKIY, M.A.;  
KAFTANOV, M.P.; KUCHKO, I.I.; LAR'KINA, F.Ye.; MANCHEVSKIY, I.V.;  
MARAMYGIN, G.F.; MERKUTOV, V.N.; NASIBULIN, A.S.; NEFEDOV, M.K.;  
PERMYAKOV, V.M.; CHELYSHEV, N.A.; CHVANOV, L.K.

Investigating conditions of rolling on three-high billet mills.  
Izvy vys. ucheb. zav.; chern. met. 6 no.10:74-83 '63.

(MIRA 16:12)

l. Sibirskiy metallurgicheskiy institut i Kuznetskiy metallurgicheskiy  
kombinat.

CHELYSHEV, N. A.; PERMYAKOV, V. M.; KAFTANOV, M. P.; ZAYKOV, M. A.;  
KAMINSKIY, D. M.; ZAKHARENKO, N. I.; PROKOP'YEV, A. V.

Peculiarities of rolling rimmed steel ingots on a forge blooming  
mill. Izv. vys. ucheb. zav.; chern. met. 5 no.12:74-80 '62.  
(MIRA 16:1)

1. Sibirskiy metallurgicheskiy institut.

(Rolling(Metalwork)) (Steel ingots)

ZAYKOV, M.A., kand.tekhn.nauk, dotsent; TSELUIKOV, V.S., inzh.; KAMINSKIY,  
D.M., kand.tekhn.nauk, dotsent; PERETYAT'KO, V.N., inzh.; KAFTANOV,  
M.P., inzh.; PERMYAKOV, V.M., inzh.; PROKOP'YEV, A.V., inzh.

Investigating and improving cogging conditions of sheet rolling  
mills. Izv. vys. ucheb. zav.; chern.met. no.5:131-144 My '58.

(MIRA 11:7)

1. Sibirskiy metallurgicheskiy institut.  
(Rolling mills)

PROKOP'YEV, B.M. (Biryulevo Moskovskoy oblasti)

Explaining internal fluid pressure in the 6th class. Fiz.v  
shkole 16 no.1:71-72 Ja-Ve '56. (MLRA 9:3)

1. 13-ya shkola rabochey molodezhi.  
(Hydrostatics--Study and teaching)

SHOSTAKOVSKIY, M.F.; AIAVIN, A.S.; PROKOPENEV, B.V.; TROFIMOV, B.A.; LAVROV,  
V.I.; DERIGLAZOV, N.M.

Kinetic isotopic effect of deuterium in the hydrolysis of vinyl  
ethers. Dokl. AN SSSR 163 no.6:1412-1415 Ag '65.  
(MIRA 18:8)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR. 2. Chlen-Korrespondent AN SSSR (for Shostakovskiy).

SHOSTAKHOVSKIY, M.F.; ATAVIN, A.S.; PROKOP'YEV, B.V.; TROFIMOV, D.A.;  
LAVROV, V.I.; DERIGLASOV, N.M.

Kinetics of hydrolysis of monovinyl ethers of ethylene glycol,  
di-, and triethylene glycols. Izv. AN SSSR. Ser. khim. no.8:  
1485-1487 '65. (MIRA 18:9)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.

TKACHUK, V.G., doktor geologo-mineralog. nauk; TOLSTIKHIN, N.I., prof.; PINNEKER, Ye.V., kand. geologo-mineralog. nauk, mladshiy nauchnyy sotr.; YASNITSKAYA, N.V., mladshiy nauchnyy sotr., khimik; KRUTIKOVA, A.I., mladshiy nauchnyy sotr., khimik; SHOTSKIY, V.P., kand. geogr. nauk; ORLOVA, L.M., starshiy gidrogeolog; STEPANOV, V.M., kand. geologo-mineralog. nauk; VLASOV, N.A., kand. khim. nauk; PROKOP'YEV, B.V., kand. khim. nauk; CHERNYSHEV, L.A., starshiy prepodavatel'; PAVLOVA, L.I., starshiy prepodavatel'; Prinimali uchastiye: IVANOV, V.V., kand. geologo-mineralog. nauk; YAROTSKIY, L.A., kand. geologo-mineralog. nauk; KARASEVA, A.P., nauchnyy sotr.; ARUTYUNYANTS, R.R., nauchnyy sotr.; ROMANOVA, E.M., nauchnyy sotr.; TROFIMUK, P.I., starshiy hidrogeolog; LADEYSHCHIKOV, P.I., starshiy nauchnyy sotr., kand. geogr. nauk; LYSAK, S.V., starshiy laborant; KRUCHININA, L.Yu., laborant; SEMENOVA, Ye.A., red. izd-va; BOCHEVER, V.T., tekhn. red.

[Mineral waters of the southern part of Eastern Siberia] Mineral'nye vody iuzhnoi chasti Vostochnoi Sibiri. Moskva. Vol.1. [Hydrogeology of mineral waters and their significance for the national economy] Gidrogeologija mineral'nykh vod i ikh narodnokhoziaistvennoe znachenie. Pod obshchei red. V.G.Tkachuk i N.I.Tolstikhina. 1961. 346 p. (MIRA 14:8)

1. Akademija nauk SSSR. Sibirskoye otdelenije. Vostochno-sibirskiy geologicheskiy institut. (Continued on next card)

TKACHUK, V.G.--- (continued) Card 2.

2. Vostochno-Sibirskiy geologicheskiy institut (for Tkachuk, Pinneker, Yasnitskaya, Krutikova, Lysak). 3. Institut geografii Sibirskego otdeleniya Akademii nauk SSSR (for Shotskiy). 4. Chitinskoye geologicheskoye upravleniye (for Orlova). 5. Sosnovskaya ekspeditsiya Ministerstva geologii i okhrany nedor SSSR (for Stepanov). 6. Irkutskiy gosudarstvennyy universitet (for Vlasov, Prokop'yev, Chernyshev, Pavlova). 7. Leningradskiy gornyy institut (Tolstikhin). 8. Gosudarstvennyy nauchno-issledovatel'skiy institut kurortologii i fizioterapii (for Ivanov, Yarotskiy, Karaseva, Arutyunyants, Romanova). 9. Irkutskoye geologicheskoye upravleniye (for Trofimuk). 10. Baykal'skaya limnologicheskaya stantsiya Vostochno-Sibirskogo filiala AN SSSR (for Ladeyshchikov). 11. Otdel ekonomiki i geografii Vostochno-Sibirskogo filiala AN SSSR (for Kruchinina).

(Siberia, Eastern--Mineral waters)

PROKOP'YEV, B.V.; TRET'YAKOV, I.A.

Carbonate equilibrium in the Arshan mineral waters (Arshan Health  
Resort, Buryat-Mongol A.S.S.R.). Gidrokhim. mat. 31:164-170 '61.  
(MIRA 14:3)

1. Kafedra analiticheskoy khimii Irkutskogo gosudarstvennogo  
universiteta im. A. A. Zhdanova, g. Irkutsk.  
(Arshan--Mineral waters) (Carbonates)

PROKOP'YEV, D.I.; KARGAPOLOVA, M.G.

Therapeutic results in extrapleural pneumonolysis. Probl.  
tub. 40 no.6:101-103 '62. (MIRA 16:12)

1. Iz Respublikanskogo protivotuberkuleznogo ob"yedineniya  
(glavnnyy vrach G.V. Shatrova) Udmurtskoy ASSR.

PROKOP'YEV, D.S., inzh.; KUTOVOY, Ye.A., inzh.

Rod bolting for sheathings. Shakht.stroi. no.1:24-25  
Ja '60. (MIRA 13:5)

1. Treast Stalinshakhtstroy.  
(Mine roof bolting) (Shaft sinking)

PROKOP'YEV, D.S., geroy Sotsialisticheskogo Truda

The "Vetka Glubokaia" mine is ready for operation. Shakhtostroi. no.2:  
22-23 F '59.

1. Upravlyayushchiy Trestom Stalinshakhtstroy.  
(Donets Basin--Coal mines and mining)

PROKOP'YEV, D.S., inzh.; KUTOVOY, Ye.A., inzh.; PIVOVAR, G.B., inzh.  
Use of skip hoisting in mine building. Shakht.stroi. no.2:23-24 F '59.  
(MIRA 12:3)

1. Trest Stalinshakhtstroy.  
(Mine hoisting)

SMERTYUK, V.G., inzhener; PROKOP'YEV, D.S., inzhener.

Problem of transition from vertical shaft sinking to horizontal  
mining. Ugol' 30 no.2:17-21 F '55. (MIRA 8:4)  
(Coal mines and mining) (Shaft sinking)

Fuel abstracts PROKOP'EV, D.S.

Y. 15, Jan 1954  
natural solid fuels; mining

✓ 53. DEWATERING DURING SINKING OF DEEP SHAFTS IN DONBASS.  
Prokop'ev, D.S. - (Ugol (Coal), July 1953, 9-14). Existing projects tend to include a pump at the base and a series of pumping stations in galleries driven sideways from the shaft at intervals of about 200 m. Improvements suggested include cementing off water bearing strata, arranging annular gutters in the lining just below these strata to stop most of the water reaching the base of the shaft, and using higher head pumps at larger intervals in small niches in the sides of the shaft. (L).

PROKOP'YEV, G.; MAL'TABAR, L.; SININA, V., red.; TEL'PIS, V., tekhn.  
red.

[Viticulture in the seven-year plan of Moldavia] Vinogradarstvo  
Moldavii v semiletke. Kishinev, Gos. izd-vo "Kartia Moldoveniake,"  
1960. 78 p. (MIRA 15:4)  
(Moldavia--Viticulture)

PROKOP'YEV, G., starshiy leytenant; ZAYATS, N., leytenant

In the field, at radio stations. Voen. vest 42 no.2:99-101 F '63.

SHIRSHOV, I.V., kand. ekon. nauk, st. nauchnyy sotr., red.; LISNYAK, Ye.I., red.; SHEVCHUK, I.P., kand. ekon. nauk, red.; PROKOP'YEV, G.S., kand. ekon. nauk, red.; NIKIFOROV, A.V., nauchnyy sotr., red.; YUSIM, N.B., red.; MARKOVICH, G.L., tekhn. red.

[Problems of the economics of the agriculture of Moldavia]  
Voprosy ekonomiki sel'skogo khozaiistva Moldavii; materialy.  
Kishinev, Izd-vo "Shtiintsa," 1960. 182 p. (MIRA 16:2)

1. Respublikanskoye ekonomicheskoye soveshchaniye po sel'skomu  
khozyaystvu, Kishinev, 1959. 2. Molsdavskiy filial Akademii nauk  
SSSR (for Shirshov, Nikiforov).  
(Moldavia--Agriculture--Economic aspects)

4028 PROKOP'YEV, G. S.

Spetsializasiya i sochetaniye otrasyley v kolkhozakh ubyanskogo rayona  
novosibirskoy oblasti. M., 1954. 16 s. 21 sm. (Mosk. ordena Lenina  
s. Kh. akad. im K. A. Timiryazeva). 110 ekz. B. ts. (54-56671)

|            |   |  |
|------------|---|--|
| COUNTRY    | : | USSR   |
| CATEGORY   | : | Cultivated Plants. Fruits. Berries.  |
| ABS. JOUR. | : | REhBiol., No. 23, 1958 No. 104947  |
| AUTHOR     | : | Prokopen'ev, I. S., Maltseva, N. N.  |
| INST.      | : | Ministry of Agriculture of Moldavia  |
| TITLE      | : | Orchard Cultivation and Viticulture in Pyatnitskiy Rayon.  |
| ORG. PUB.  | : | Gradinerstvo, vitjazitstvo i vinozrebitstvo Moldovei, 1958, No. 1, 48-50; Sadovedstvo, vinozrebitstvo i vinozdeliya Moldavii.* |
| ABSTRACT   | : | No abstract.   |

\*) 1958, No. 1, 46-48

CARD: 1/1

150

SHIROKOV, Matvey Yevdokimovich. Prinimali uchastiye: PROKOP'YEV, I.M., vrach; KATOLIK, G.M., vrach; KERBELEV, V.I., vrach; SHIROKOVA, N.S., vrach. KHODOS, Kh.G., prof., red.; BORDONSKIY, S., red.; YURGANNOVA, M., tekhn.red.

[Darasun Health Resort] Kurort Darasun. Izd.2., dop. i ispr.  
Chita, Chitinskoe knizhnoe izd-vo, 1960. 142 p.  
(MIRA 13:11)  
(DARASUN-KURORT--THERAPEUTICS, PHYSIOLOGICAL)

DIMITRIYEV, V.D., otv.red.; PROKOP'YEV, I.P., red.; SIDOROV, P.A.,  
red.; DENISOV, P.V., red.; PERLOV, P.V., tekhn.red.

[Economic and cultural development of the Chuvash A.S.S.R.]  
Razvitiye ekonomiki i kul'tury Chuvashskoi ASSR. Cheboksary,  
Chuvashskoe gos.izd-vo, 1960. 327 p.

(MIRA 14:5)

1. Cheboksary. Chuvashskiy nauchno-issledovatel'skiy insti-  
tut yazyka, literatury, istorii i ekonomiki.  
(Chuvashia--Economic conditions) (Chuvashia--Culture)

PROKOP'YEV, I.V.

VINOGRADOV, V.M.; RAZUMOVSKIY, V.V.; SHROVA, L.V.; TARZIMANOV, P.F.; KOZHENVNIKOV, O.V.; PICHUGIN, B.M.; PROKOP'YEV, I.V.; FEDOROV, B.A.; KOSHETATEVSKIY, V.S.; IVANOVA, A.S.; SNIGIREV, V.G., YASHCHENKO, G.I.; VORONKOVA, Ye.A.; ZAMYATINA, A.A.; SERGEYEV, N.A.; KUREPOV, A.I.; POPOV, B.L.; FINOGENOV, V.P., NABOROV, V.B.; CHENCHIKOVSKIY, S.F.; IVANOV, Ye.A.; AIKHIMOV, V.S., red.; VINOGRADOV, V.M., red.; SMIRNOV, A.M., red.; KAKHOVSKAYA, O.G., red. izd-va; RUDCHENKO, A.M., red. izd-va; LEKANOVA, I.S., tekhn. red.

[Foreign commerce of the U.S.S.R. with capitalist countries] Vneshniaia torgovlia SSSR s kapitalisticheskimi stranami. Moskva, Vnesh-torgizdat, 1957. 232 p. (MIRA 11:7)

1. Moscow. Nauchno-issledovatel'skiy kon'yunkturnyy institut.  
(Russia--Commerce)

YARTSEV, V.A., dotsent, kand.tekhn.nauk; PROKOP'YEV, L.N., gornyy inzh.  
D'YAKOV, V.V., gornyy inzh.

Intensity of dust formation under various mining systems in some Ural  
iron-ore mines. Sbor. rab. po silik. no3:19-31 '61. (MIRA 15:10)

1. Sverdlovskiy gornyy institut.  
(Ural Mountains—Iron mines and mining) (Mine dusts)

PROKOP'YEV, Mikhail Nikolayevich, kand. sel'khoz. nauk; YURRE, N A.,  
red.; IOFINOVA, TS.B., red. izd-va; YAL'TSEVA, L.S., tekhn.  
red.

[Regeneration of spruce following the skidding of untopped trees]  
Vozobnovlenie eli posle trelevki derev'ev s kromami. Moskva,  
Goslesbumizdat, 1961. 57 p. (MIRA 14:8)  
(Spruce)

PROK P'YEV, Mikhail Nikolayevich

[Forest plantations on concentrated cuttings] Lesnye  
kul'tury na kontsentrirovannykh vyrubkakh. Moskva,  
Lesnaia promyshlennost', 1964. 144 p. (MIRA 12:5)

PROKOP'YEV, Mikhail Nikolevich, kand. sel'khoz. nauk; DERYABIN,  
D.I., red.; ~~GOLOVIN~~ R.N., red.izd-va; KARLOVA, G.L.  
tekhn. red.

[The young spruce growth and its use in reforestation]  
Podrost eli i ego ispol'zovanie dlja vosstanovlenija lesa.  
Moskva, Goslesbumizdat, 1963. 64 p. (MIRA 16:8)  
(Spruce) (Forest reproduction)

PROKOP'YEV, M.N., kand. sel'khoz. nauk, otv. red.; BERGER, D.S., zam. otv. red.; SYSOYEV, Ye.P., kand. sel'khoz. nauk, red.; SMIRNOV, P.D., red.; LALETINA, M.Ye., red.; KHOROSHAVIN, A., tekhn. red.

[Efficient methods of cutting and reestablishing taiga forests in the European part of the U.S.S.R.; collection of reports of the Kirov Interprovincial Scientific Technical Conference] Ratsional'nye priemy rubok i vostanovleniya taezhnykh lesov evropeiskoi chasti SSSR; sbornik rabot Kirovskoi mezhoblastnoi nauchno-tehnicheskoi konferentsii. Kirov, Kirovskoe obl. upr. nauchno-tehn. ob-va lesnogo promyshl. i lesnogo khoz., 1962. 136 p.  
(MIRA 17:1)

1. Zaveduyushchiy laboratoriyye lesovedstva i lesovosstanovleniya Kirovskogo nauchno-issledovatel'skogo instituta lesnoy promyshlennosti (for Prokop'yev). 2. Nachal'nik Otdela nauchno-tehnicheskoy informatsii Kirovskogo nauchno-issledovatel'skogo instituta lesnoy promyshlennosti (for Berger).

FROM P'TYU, L.L., Sand Air Sci--(dist) "Promulgation of *Order*  
*building* ~~new~~ Chinese," Dec, 1953. Copy (Min of Higher Education USSR.  
Dec Order of Min of Higher Education (S.U.S.S.R.), 1953  
(L, 15-37, 100)

-12-

K.

USSR/Forestry - Forest Economy.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 68012

Author : Prokop'yev, M.I.

Inst : Leningrad Forest Engineering Academy.

Title : Lumbering With Cutting-Trailing Machines and Its Effect on Tree Reproduction.

Orig Pub : Tr. Leningrad. lesotekhn. akad., 1957, No 82, Part 1, 63-83.

Abstract : When this method was tested in a spruce-whortleberry forest of 0.7-0.9 density and V class maturity (Leningrad Oblast'), it was established that on ~ 70% of the area lumbering operations, by causing soil variations, either improved or worsened the microclimate; the altered areas comprised ~ 40% of the lumbered area, of which ~ 25% was improved and ~ 13% worsened as concerns reproduction.

Card 1/2

USSR/Forestry - Forest Economy.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 68012

K.

from seed. On the average, 35% of the underbrush is killed during the process of lumbering with cutting-trailing machines. This type of lumbering preserves 10-15% more underbrush than when trees are dragged out with KT-12 tractors, and 20-30% more than when trees are dragged out with TL-3 and L-19 windlasses. A description is given of measures for treating damaged undergrowth left on the lumbered areas and also other measures for assisting the lumbered areas to reproduce themselves naturally. -- Ye.N. Savin

Card 2/2

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+EkoP'nev M.P.  
Semi-Cultivable Plants - Cereals.

Abstrakt : Ref. Khar - Biol., No. 3, 1958, Moscow  
Author : Prokop'yev, N. A.  
Type : ~~Local~~  
Title : A Sort Derived from the Local Population.  
Orig. Pub : Seleksiya i selenenie, 1957, No. 3, 51-52  
Abstract : The Mil'burun is a line, with increased productivity and a high multiplying coefficient, has been isolated from the local semi-cultivable populations of the Udmurtskaya ASSR. In certain years this sort gives significantly higher yields than its standard and is very resistant to frost.

Card 1/1

*Prokop'yev, M.P.*

USSR/Cultivated Plants - Grains.

M-2

Abs Jour : Ref Zhur - Biol., No 20, 91614

Author : Prokop'yev, M.P.

Inst : Udmurt State Pedagogical Institute.

Title : Harvest Descendant of Local Breed of Summer Wheat.

Orig Pub : Uch. zap. Udmurtsk. gos. ped. in-t, 1957, vyp. 11, 155-160.

Abstract : Multrul 10 line was developed in Kezskiy Rayon of Udmurt ASSR starting from 1936, which as a variety has passed the state variety testing since 1946. In humid and cool years it gives an increased yield. In the tillering stage it survives drought without significant loss. In comparison with Lutescens 62 it is less subject to thinning during sprouting and growth, has a longer tillering stage, the stalk is 7 - 10 cm taller, the spike is 0.5 - 1 cm longer.

Card 1/2

USSR/Cultivated Plants - Grains.

M-2

Abs Jour : Rcf Zhur - Biol., No 20, 1958, 91614

It is less affected by smut, more resistant to grain sprouting on stalks during harvest, and has an average resistance to wilt and fall. -- M.V. Dranishnikov.

Card 2/2

- 25 -

PROKOP'YEV, M.P., kand. sel'skokhoz. nauk

Einkorn. Zemledelie 27 no.1:77-78 Ja '65.

(MIRA 18:3)

1. Udmurtskiy pedagogicheskiy institut.

PROKOP'YEV, M.P.

Spring wheat breeding in the Udmurt A.S.S.R. Nauch. dokl. rye.  
shkoly; biol. nauki no.4:168-171 '64. (MIRA 17:12)

1. Rekomendovana kafedroy botaniki Udmurtskogo pedagogicheskogo  
instituta.

133-8-27/28

AUTHORS: Grave, I.P., Smirnov, M.P., Yakovlev, V.F., (Cands.Tech.Sc.)  
and Prokop'yev, N.M. (Engineer).

TITLE: Jointless tracks on a monolithic foothold on metallurgical  
works. (Besstykovyye puti na monolitnom osnovanii v  
metallurgii).

PERIODICAL: "Stal'" (Steel), 1957, No.8, pp.762-764 (USSR).

ABSTRACT: Service conditions of rails on tracks in some departments  
of iron and steel works (hot metal ladles, ingot tracks)  
are discussed. In view of heavy working conditions and  
difficulties in carrying out proper maintenance, the  
Leningrad Institute of Engineers of the Railway Transport  
proposed the use of monolithic concrete bases and welded  
rail joints for such tracks. Deficiencies and advantages  
of the monolithic base are discussed. Two versions of a  
monolithic base (Figs.1 and 2 respectively) are described.  
The method of fixing rails is shown in Fig.3. There are  
3 figures.

Card 1/1 ASSOCIATION: Leningrad Institute of Engineers of the Railway Transport.  
(Leningradskiy Institut Inzhenerov Zheleznodorozhnogo  
Transporta).

AVAILABLE: Library of Congress

PROKOP'YEV, N.

Reviving the past glory of the northern wood chemicals industries.  
Prom. koop. 13 no.7:7 Jl '59. (MIRA 12:10)

1.Zamestitel' predsedatelya pravleniya oblpromsoveta, Arkhangel'sk.  
(Archangel Province--Wood-using industries)

PROKOP'YEV, N.N.

GRAVE, I.P., kandidat tekhnicheskikh nauk; SMIRNOV, M.P., kandidat tekhnicheskikh nauk; YAKOVLEV, V.F., kandidat tekhnicheskikh nauk; PROKOP'YEV, N.N., inzhener.

Jointless tracks on a monolithic foundation in metallurgical plants.  
(MLRA 10:9)  
Stal' 17 no.8:762-764 Ag '57.

1. Leningradskiy institut inzhenerov zhelezodorozhного transporta.  
(Railroads--Track) (Railroads, Industrial)

PROKOP'YEV, N.P., starshiy inzh.

Electromechanical stop of the M-150 winding machine. Tekst.prom.  
22 no.2:46-47 F '62. (MIRA 15:3)

1. Byuro tekhnicheskoy informatsii Chuvashskogo sovnarkhoza.  
(Winding machines)

PROKOP'YEV, O.P.

Continuing progress of communist labor. Neftianik 8 no.1:3-5 Ja '63.  
(MIRA 16:3)

1. Glavnoye upravleniye po transportu i snabzheniyu neft'yu i  
nefteproduktami RSFSR.  
(Tatar A.S.S.R.—Petroleum—Pipelines)

PROKOP'YEV, O.P.

Providing the sanitary engineering industry with a powerful base  
for equipment. Stroi. mat. 10 no.9:30-31 S '64 (HTBA 12:1)

1. Starshiy inzh. Soyuzglavmontekhniproama.

PROKOP'YEV, O.P.; NECHAYEV, A.G.

The petroleum pipeline administration is an enterprise of communist  
labor. Neftianik 8 no.2:5-7 F '63. (MIRA 16:10)

1. Sotrudniki Glavnogo upravleniya po transportu i snabzheniyu  
neft'yu i nefteproduktami RSFSR.

PROKOP'YEV, O.P.

Dissemination of progressive practices in the Main Administration  
for Supply of Petroleum Products to the National Economy of the  
RSFSR. Transp. i khran. nefti no. 3:39-40 '63. (MIRA 17:7)

1. Glavnoye upravleniye po transportu i snabzheniyu neft'yu  
i nefteproduktami RSFSR.

NIKOLAYEV, K., starshiy inzh.; PROKOP'YEV, P.

Reconditioning of the distorted grooves of the OA-2 singeing  
machine. Tekst.prom. 21 no.9:96 S '61. (MIRA 14:10)

1. Byuro tekhnicheskoy informatsii Chuvashskogo sovnarkhoza.  
(Textile machinery--Maintenance and repair)

ZOTOV, A.N.; PROKOP'YEV, P.N., starshiy inzh.

Following the example of the brigade of communist labor. Tekst.  
prom. 21 no.12:70-72 D '61. (MIRA 15:2)

1. Nachal'nik byuro tekhnicheskoy informatsii Chuvashskogo  
sovmarkhoza (for Zотов). 2. Byuro tekhnicheskoy informatsii  
Chuvashskogo sovmarkhoza (for Prokop'yev).  
(Chuvashia--Textile industry--Labor productivity)

PROKOP'YEV, P.N., starshiy inzhener

Device for regulating and balancing propeller fans. Tekst.prom.  
22 no.4:85-86 Ap '62. (MIRA 15:6)

1. Byuro tekhnicheskoy informatsii Chuvanshakogo govnarkhoza,  
(Fans,Mechanical)

ADAKHOVSKIY, A.P.; GORDOV, A.N.; LAFF, G.B.; LEBEDEVA, Z.S.; MAKSIMOVA,  
V.L.; OMEL'CHENKO, G.F.; PROKOP'YEV, P.N.; ERGARDT, N.N.

Investigating new types of thermocouples for measuring temperatures  
up to 1,800° C. Trudy inst.Kom.stand., mer i izm.prib. no.42:  
29-38 '60. (MIRA 14:1)

(Thermocouples)

PROKOP'YEV, P.N., starshiy inzh.

Modifications in the design of the differential box balancing mechanism of the ShB-140 sizing machine. Tekst.prom. 21 no.12:36 D '61. (MIRA 15:2)

1. Byuro tekhnicheskoy informatsii Chuvashskogo sovnarkhoza.  
(Textile machinery)

2  
S/263/62/000/003/006/015  
1004/1204

90 1 06  
AUTHOR: Adakhovskiy, A. P., Gordov, A. N., Lapp, G. B., Lebedeva, Z. S., Maksimova, V. I.  
Omelchenko, G. F., Prokopyev, P. N. and Erhardt, N. N.

TITLE: Investigation of new types of thermocouples for measurement of temperatures up to 1800 C

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. Izmeritel'naya tekhnika, no. 3, 1962, 38, abstract  
32.3.229. "Tr. in-tov Kom-ta standartov, mer i izmerit. priborov, pri Sov. Min. SSSR",  
1960, no. 42 (102), 29-38

TEXT: The authors studied thermocouples, both electrodes of which were made of platinum-rhodium alloys of varying composition. Sverdlov sovnarkhoz (district economic council) produced platinum-rhodium wires with different rhodium contents, 0.3, 0.5, 0.8 and 1.0 mm in diameter and studied their thermoelectric uniformity. The latter was determined on a semi-automatic industrial set-up consisting of an oven for heating the junction of the investigated wire with a comparison electrode, a rewinding unit and a laboratory potentiometer. The degree of uniformity of the thermoelectric material was determined by the value of the thermoelectric emf created at the junction of the investigated wire with a comparison electrode. The comparison electrode was formed by a piece of wire cut from an end of the investigated bundle. The oven of the set-up was built

Card 1/2

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Investigation of new types of...

S/263/62/000/003/006.015  
1001/1204

of porcelain tube 15 mm diameter and 90 mm long, a platinum heater, thermal insulation, an outer mantle and a stand. The temperature inside the cavity of the oven was determined by means of a Pt-Rh thermocouple. The Sverdlov branch of VNIIM (VNIIM) collected and analyzed the data in order to establish deviation limits from the average calibration for the thermoelectric emf of the couples. VNIIM developed a method of calibration of thermocouples, studied their calibration characteristics and analyzed the variation of these properties for thermocouples stemming from different melts. The influence of the contact between the thermoelectrodes and the supporting ceramic of different composition under high temperature conditions and the stability of the thermocouples under various operating conditions were studied. As a result of these comprehensive studies it is concluded that the thermocouples of the IIP 30/6 (PR 30/6) type are the most accurate for measurement of temperatures of molten metals and of temperatures above 1400°C for several hundred hours. For operation under actual working conditions the fixtures and the protective caps should be made of aluminum oxide with titanium oxide added. There are 5 figures, 4 tables and 6 references.

[Abstracter's note: Complete translation.]

Card 2/2

KOSACHEV, Vladimir Matveyevich, kand.ekonom.nauk; PROKOP'YEV, S.,  
red.; IORYSH, A., red.; KOROLEVA, A., mladshiy red.;  
ULANOVA, L., tekhn.red.

[Socialist competition and labor productivity] Sotsialisti-  
cheskoe sorevnovanie i proizvoditel'nost' truda. Moskva,  
Izd-vo sotsial'no-ekon.lit-ry, 1961. 153 p.

(MIRA 15:5)

(Socialist competition)  
(Labor productivity)

SDOBNOV, Semen Ivanovich; PROKOP'YEV, S., red.; SIMAKINA, I., mladshiy red.;  
ULANOVA, L., tekhn. red.

[Two forms of socialist property and ways to merge them] Dve formy  
sotsialisticheskoi sobstvennosti i puti ikh sblizheniia. Moskva,  
Izd-vo sotsial'no-ekon. lit-ry, 1961. 275 p. (MIRA 14:8)  
(Socialist property) (Collective farms)

LYAPIN, A.P., prof., glav. red.; DOROSHEV, I.A., prof., red.; KULIKOV, A.G., dotsent, red.; GRZHEGORZHEVSKIY, A.N., dotsent, red.; KUDRYAVTSEV, S.P., red.; PROKOP'YEV, S.P., red.; NAUMOV, K.M., tekhn. red.

[Labor productivity problems during the period of the building of communism] Voprosy proizvoditel'nosti truda v period stroitel'stva kommunizma. Moskva, Izd-vo VPSh i AON pri TsK KPSS, 1961. 430 p. (MIRA 14:8)

l. Moscow. Akademiya obshchestvennykh nauk.  
(Labor productivity)

SHIRINSKIY, Ivan Dmitriyevich; PROKOP'YEV, S.P., red.

[Planned proportional development of the national economy as the  
economic law of socialism] Planomernoe, proporsional'noe raz-  
vitiye narodnogo khoziaistva - ekonomicheskii zakon sotsializma.  
Moskva, Izd-vo VPSh i AON pri TsK KPSS, 1959. 54 p. (MIRA 13:5)

(Russia--Economic policy)

FIGURNOW, Petr Konstantinovich, prof.; PROKOP'YEV, S.P., red.

[Capital and surplus value]. Kapital i pribavochnaya  
stoimost'. Moskva, Izd-vo VPSN i AON pri TsK KPSS, 1959.  
75 p. (MIRA 13:2)

(Economics)

PROKOP'YEV, S. P.

FIGURNOV, P.K., prof., glavnnyy red.; BARANOV, A.A., red.; NAZARENKO,  
I.T., red.; PROKOP'YEV, S.P., red.

[Condition of workers in capitalist countries and their class  
struggle] Polozhenie i bor'ba rabochego klassa kapitalisticheskikh stran. Moskva, Izd-vo VPSh i MGN pri TsK KPSS, 1959.  
(MIRA 13:2)  
301 p.

1. Moscow, Akademiya obshchestvennykh nauk.  
(Labor and laboring classes)

VYGODSKIY, S.L., prof., doktor ekon.nauk, glavnnyy red.; FIGURNOV, P.K.,  
prof., red.; AFANAS'YEV, V.S., kand.ekon.nauk, red.; PROKOP'YEV,  
S.P., red.; NAUMOV, K.M., tekhn.red.

[Present-day economic status of capitalist countries] Sovremennoe  
ekonomicheskoe polozhenie kapitalisticheskikh stran. Moskva, Izd-vo  
VPSh i AON pri TsK KPSS, 1959. 142 p. (MIRA 12:4)

1. Moscow. Akademiya obshchestvennykh nauk. Kafedra politicheskoy  
ekonomii.

(Economics)

KHOKHLOV, P.A.; CHIKULAYEV, S.D.; PROKOP'YEV, V.D., otv. red.;  
OKHLOPKOV, Ye.D., red. izd-va; SOLOV'YEV, Ye.P., tekhn. red.

[Followers of Aleksandr Kol'chik in Aldan] Posledovateli  
Aleksandra Kol'chika na Aldane. IAkutsk, IAkutskoe knizh-  
noe izd-vo, 1959. 28 p. (MIRA 14:5)

1. Yakutsk (Province) Byuro tekhnicheskoy informatsii.  
(Aldan Plateau--Coal mines and mining)

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4

YEFREMOV, V., doktor tekhn. nauk; PROKOP'YEV, V., inzh.; FINKEL'SHTEYN, E.

Some problems in the overhaul of the ZIL-130 engines. Avt. transp.  
43 no.4:25-28 Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4"

PROKOP'YIN, V., mekhanik (Bryansk); MALYSH, V., inzh. (Zaporozh'ye);  
LANEVSKIY, Ya., inzh. (Arkhangel'sk); GROSH, K. (Chelyabinsk);  
POPKOVA, Ye. (Chelyabinsk)

Suggested, created, introduced. Izobr.i rats. no.2:20-21 F '62.  
(MIRA 15:3)  
(Technological innovations)

KHANAPETOV, M.V., inzh.; PROKOP'YEV, V.I., inzh.

News. Mont. i spets. rab. v stroi. 26 no.8:30-32 Ag '64.  
(MIRA 17:11)

PROKOP'YEV, V.I.

Longitudinal acoustic oscillations in a pipe with varied cross section. Izv. vys. ucheb. zav.; av. tekhn. ? no. 426-31  
'64 (MIRA 1821)

ACCESSION NR: AP4048504

S/0147/64/000/004/0026/0031

32

29

B

AUTHOR: Prokop'yev, V.I.

TITLE: Longitudinal acoustic oscillations in a tube of variable section

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 4, 1964, 26-31

TOPIC TAGS: acoustic oscillation, conical shell, longitudinal acoustic vibration, variable diameter tube, eigenfrequency, gas particle velocity

ABSTRACT: The author considers the problem of determining the eigenfrequencies of the longitudinal acoustic vibrations of an immobile column of gas in an axisymmetrical tube of variable cross section with a rigid shell. A fundamental assumption of the study is that the parameters of the medium in the plane perpendicular to the axis of the tube are identical. The values of the disturbances in the thermodynamic parameters of the medium, with oscillations present, are considered, moreover, to be small in comparison with the undisturbed parameters. In the method proposed by the author, in view of the smallness

Card 1/3

L 41138-65

ACCESSION NR: AP4048504

the wave is much smaller than the speed of sound in the medium. An equation is derived  
which coincides in form with the acoustic oscillation equation given by F. M. Morz and  
T. M. II. 1958 but which is more general.

Card 2/3

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ACCESSION NR: AP4048504

3

moving part of the vibrator is a flat duralumin piston which emits acoustical waves as it travels. Variable-frequency signals were fed to the vibrator from a ZG-10 audiofrequency generator. An MD-55 pressure sensor was set flush against the opening of the upper base

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4

has: 3 figures and 28 formulae.

ASSOCIATION: None

SUBMITTED: 25Apr64

ENCL: 00

SUB CODE: GP, AS

NO REF SOV: 006

OTHER: 001

Card 3/3

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4"

BRUNS, A.V.; PROKOF'YEV, V.K.

Measuring radiation of helium on the sun in far ultraviolet. Isk.-  
sput.Zem. no.11:15-22 '61. (MIRA 15:1)  
(Solar radiation--Measurement) (Artificial satellites)

ZHOVYY, I.F.; YEMEL'YANOVA, N.D.; KOPYLOVA, O.A.; PROKOP'YEV, V.N.

Materials for a study of the trombiculid mites (Trombiculinae  
ewing) of Transbaikalia. Izv. Irk.gos.nauch.-issl.protivochum.  
inst. 17:219-226 '58. (MIRA 13:?)  
(TRANSBAIKALIA--MITES)

PROKOP'YEV, V.N.; MOSKALETS, E.A.

Ectoparasites from the nests of house martins on the Dzhida  
River bank cliffs southwestern Transbaikalia. Dokl. Irk. gos.  
nauk.-issl. protivochum. inst. no.5:186-187 '63  
(MIRA 18sl)

YEMEL'YANOVA, N.D.; PROKOP'YEV, V.N.; GORDEYEVA, V.N.; LAZARENKO, L.P.;  
BUBLIYENKO, A.V.; KOZLOVSKAYA, O.L.

Materials on the study of the ticks of the genus Ixodes (family  
Ixodidae) of northeastern Asia. Dokl. Irk. gos. nauch.-issl. pro-  
tivochum. inst. no. 58188-193 '63 (MIRA 18:1)

*ZHOVTVYY, I.F.; PROKOP'YEV, V.N.*

Number of generations and length of the developmental cycle in  
Oropsulla cilantiewi (Aphaniptera) in Transbaikalia. Tez. i dokl.  
konf. Irk.gos.nauch.-issl.protivochum. inst. no.2:16-18 '57.  
(TRANSBAIKALIA--FIAS) (MIRA 11:3)

ZHOVTTYY, I.P.; PROKOP'YEV, V.N.

Number of generations and the duration of the developmental cycle of *Oropsylla silantiewi* Wagn (Aphaniptera) in Transbaikalia. Izv. Irk.gos.nauch.-issl.protivochum.inst. 17:21-26 '58. (MIRA 13:7)  
(TRANSBAIKALIA--FLEAS)

PROKOP'YEV, V.N.

*Ecology of Daurian and Mongolian pikas. Izv. Irk.gos.nauch.-  
issl.protivochum.inst. 16:110-113 '57. (MIRA 13:7)  
(TUVA AUTONOMOUS PROVINCE--PIKAS)*

PROKOP'YEV, V.N.

Method of determining the physiological age of the female of  
Oropsylla Silantiewi Wagn. and seasonal changes in the age  
composition of the flea population. Izv.Irk.gos.nauch.-issl.  
protivochum.inst. 17:91-108 '58. (MIRA 13:7)  
(TRANSBAIKALIA--FLEAS)

1. W.168-66 EWT(d) IJP(c)  
ACC NR: AP6023965

SOURCE CODE: UR/0376/66/002/004/0453/0462

28

B

AUTHOR: Prokop'ye, V. P.; Shimanov, S. N.

ORG: Ural State University im. A. M. Gor'kiy (Ural'skiy gosudarstvenny universitet)

TITLE: The stability in the critical case of a double zero root for a system  
with aftereffects

SOURCE: Differentsial'nyye uravneniya, v. 2, no. 4, 1966, 453-462

TOPIC TAGS: motion stability, approximate solution, differential equation solution,  
~~LINEAR OPERATOR~~

ABSTRACT: A method is presented for investigating unperturbed motions of systems  
with aftereffects for the critical case of double roots. The following equation is  
analyzed

$$\frac{dx_i(t)}{dt} = \sum_{l=1}^n \int_{-\tau}^0 x_l(t+0) d\eta_{il}(0) + X_i(x_1(t+0), \dots, x_n(t+0)) \quad (1)$$

(i = 1, ..., n),

where the integrals are interpreted in the sense of Stieltjes. A detailed formula-  
tion of the problem is followed by a description of the splitting of the linear  
operator, an investigation of the stability of the system in the general case, and a  
stability investigation of a special case. Two groups of solutions of the first  
approximation equation correspond to the double zero roots. Orig: art. has: 57

formulas.  
Card 1/2

16

UDC: 517.934

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4

L 44168-66

ACC NR: AP6023965

SUB CODE: 12 / SUBM DATE: 29May65 / ORIG REF: 007

10  
Card 2/2

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001343220011-4"

ACC NR: AP7013138

SOURCE CODE: UR/0140/67/000/001/0088/0094

AUTHOR: Prokop'yev, V. P. (Sverdlovsk)

ORG: none

TITLE: Stability in the critical case of r zero roots for a system with consequences

SOURCE: IVUZ. Matematika, no. 1, 1967, 88-94

TOPIC TAGS: first approximation, Lipschitz condition

SUB CODE: 12

ABSTRACT: A method is given for the solution of a problem on the stability of unperturbed motion for systems with consequences in the critical case of r zero roots. In addition, the r zero roots satisfy r sets of solutions of first approximation equations. The equation considered is

$$\frac{dx_i(t)}{dt} = \sum_{l=1}^n \int_{-\tau}^0 x_l(t+\theta) d\eta_{ij}(\theta) + X_i(x_1(t+0), \dots, x_n(t+0)) \\ (i = 1, \dots, n).$$

UDC: 517.917

Card 1/2

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ACC NR: AP7013138

where the integral is the Stieltjes integral;  $X_i$  are functionals determined by the piecewise continuous functions  $x(\theta)$  of the argument  $\theta$  ( $-r \leq \theta \leq 0$ ) and satisfy the Lipschitz conditions

$$\begin{aligned} |X_i(x') - X_i(x)| &< L|x' - x|, \quad L = L_i\{\|x'\| + \|x\|\}, \\ \|x(\theta)\| &= \sup(|x_1(\theta)|, \dots, |x_n(\theta)|) \quad (-r < \theta < 0), \quad L_i > 0, \quad a_i > 0, \\ X_i(0, \dots, 0) &= 0. \end{aligned}$$

Orig. art. has: 4 formulas. JPRS: 40,207

Card 2/2

L 32665-66 EWT(n)/EWP(j)/T RM  
ACC NR: AN6015044 (A)

SOURCE CODE: UU/0190/66/008/005/0787/0789

AUTHOR: Prokop'yev, V. P.; Tishkov, P.G.; Shreybert, A. I.; Khardin, A. P.

55  
B

ORG: Volgograd Politechnic Institute (Volgogradskiy politekhnicheskiy institut)

TITLE: Investigation of methylmethacrylate in the presence of halonitro-peroxides by the spin-echo method

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 5, 1966, 787-789

TOPIC TAGS: methylmethacrylate, polymerization, peroxide, gel, proton interaction, spin relaxation, spin-echo method

ABSTRACT: Investigation of methylmethacrylate polymerization in the presence of 4-chloro- and 4-bromo-4,4-dinitrobutyryl peroxides was carried out at 50°C and a peroxide concentration of  $3.7 \times 10^{-2}$  mol/l. Halonitroperoxides initiate the polymerization of methylmethacrylate without a noticeable gel effect. The nature of proton spin-lattice relaxation during polymerization with and without air was shown. Orig. art. has: 2 figures. [Based on authors' abstract] [NT]

SUB CODE: 07, 11/ SUBM DATE: 25Feb65/ ORIG REF: 002/ OTH REF: 007

Card 1/1. BLG

UDC: 66.095.26 + 678.744

PROKOP'YEV, V.S.

Discussion of the article "Instructions should be reviewed."  
Avtom., telem. i sviaz' 7 no.12:41 D '63. (MIRA 17:4)

1. Pomoshchnik revizora po bezopasnosti dvizheniya poyezdov  
Oktyabr'skoy dorogi.

IOPIN, Stanislav Leonidovich; KULIKOV, Aleksandr Vasil'yevich; KULIKOV,  
Vladimir Vasil'yevich; POLISHCHUK, Afanasiy Dmitriyevich;  
~~PROKOP'YEV, Ya.P.~~, professor, doktor tekhnicheskikh nauk, retsensent;  
REVAZOV, A.A., gornyy inzhener, retsensent; RYCHIK, F.F., kandidat  
tekhnicheskikh nauk, redaktor; PARTSEVSKIY, V.N., redaktor izdatel'-  
stva; MIKHAYLOVA, V.V., tekhnicheskiy redaktor

[Forced roof caving] Prinuditel'noe etazhnoe obrushenie. Moskva,  
Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii.  
1957. 34 p.  
(Mining engineering)

(MLRA 10:7)

L 11433-65 EWT(l)/EWT(m)/T/EEC(b)-2/EWA(m)-2 IJP(c)/ASD(a)-5/AFWL/

AS(mp)-2

ACCESSION NR: AP4048404

S/0181/64/006/011/3301/3306

AUTHORS: Gol'danskiy, V. I.; Prokop'yev, Ye. P.

B

TITLE: On the annihilation of positrons in alkali-halide crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 11, 1964, 3301-3306

TOPIC TAGS: alkali halide crystal, positron annihilation, polaron, crystal lattice defect

ABSTRACT: The authors consider the annihilation of positrons from polaron states in alkali-halide crystals, within the framework of the Pekar polaron theory (S. I. Pekar, Issledovaniya po elektronnoy teorii kristallov [Investigations on the Electron Theory of Crystals], GITTL, M-L, 1951). They calculate the lifetimes and momentum distributions of the centers of gravity of the annihilating pairs in the case of positron annihilation by polaron states in an "ideal" alkali-halide crystal, and list the additional positron annihilation

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ACCESSION NR: AP4048404

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possible in crystals with defects. The contributions made to the short- and long-lived components of the annihilation spectrum (with lifetimes  $\approx 2$  and  $\approx 5 \times 10^{-10}$  sec, respectively) are found to be affected by annihilation from the ground and excited polaron states, respectively. "The authors thank A. S. Kompanejets and A. V. Ivanova for a discussion of the results and for valuable remarks."

Orig. art. has: 8 formulas and 2 tables.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR, Moscow (Institute of Chemical Physics AN SSSR)

SUBMITTED: 26May64

ENCL: 00

SUB CODE: SS

NR REF SOV: 003

OTHER: 009

Card 2/2

GOL'DANSKIY, V.I., otv. red.; LAVRUKHINA, A.K., prof., doktor  
khim. nauk, otv. red.; RODIN, S.S., red.; PROKOF'YEV, Ye.P.,  
red.

[Nuclear chemistry] IAdernaia khimia. Moskva, Nauka, 1965.  
327 p. (MIR 18:12)

1. Akademiya nauk SSSR. Institut geokhimii i analiticheskoy  
khimii. 2. Chlen-korrespondent AN SSSR (for Gol'danskiy).

ACCESSION NR: AP4043644

S/0056/64/047/002/0659/0666

AUTHORS: Gol'danskiy, V. I.; Ivanova, A. V.; Prokop'yev, Ye. P.

TITLE: On positron annihilation in alkali-metal hydrides

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964; 659-666

TOPIC TAGS: positron reaction, annihilation reaction, half life, ionic crystal, alkali metal, correlation statistics, hydride, halide

ABSTRACT: In view of failures of earlier attempts to explain the long-lived component of positron annihilation in ionic crystals, the authors employed the self-consistent field method to develop a new treatment of the time distribution of the annihilation reaction in hydrides of alkali metals. It is shown that the presence of two components in the lifetime spectrum of the system  $e^+H^-$  is due to the annihilation from different excited levels of the system  $e^+H^-$ . The possibility of existence of a third component,

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ACCESSION NR: AP4043644

corresponding to annihilation from the ground state, is predicted. The calculated curves of the angular correlation of gamma quanta in the case of two-photon annihilation for the ground and first-excited states of  $e^+H^-$  turn out to be quite close to those obtained by experiment. This also offers evidence in favor of the proposed mechanism of annihilation. It is pointed out in conclusion that the proposed interpretation of the positron lifetime spectrum is applicable not only to alkali metal hydrides but to other ionic crystals, such as alkali-halide ones. The latter should include a third component corresponding to annihilations from the ground state. "The authors thank A. S. Kompaneyets for useful discussions and valuable hints, and to A. N. Ivanova of the mathematical division, for developing a procedure for numerical integration of the equations, as well as to A. I. Prikhochenko of the same division for carrying out the computation on the electronic computer. Orig. art. has: 2 figures and 11 formulas.

Card 2/3

ACCESSION NR: AP4043644

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 27Feb64

ENCL: 00

SUB CODE: NP

NR REF SOV: 009

OTHER: 007

Card 3/3

L 23156-66 EWT(m)/T  
ACC NR: AP6006840

SOURCE CODE: UR/0181/66/008/002/0515/0524

AUTHOR: Gol'danskiy, V. I.; Prokop'yev, Ye. P.

ORG: Institute of Chemical Physics, AN SSSR, Moscow (Institut khimicheskoy fiziki  
AN SSSR)

TITLE: Annihilation of slow positrons<sup>19</sup> in ionic media

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 515-524

TOPIC TAGS: particle annihilation, crystal theory, ionic crystal, positron, elec-  
tron positron pair

ABSTRACT: The authors study some of the fundamental characteristics of annihilation  
of thermal positrons bound to negative ions. An expression is derived for calcu-  
lating the energy of bound states of a thermalized positron and parameters are tabu-  
lated for coupling between a positron and anions in various ionic crystals. Formu-  
las are given for calculating the lifetimes of positrons on anions in fluoride,  
oxide, chloride, sulfide, iodide and telluride ionic crystals. A table is given  
showing the lifetimes for positrons in various crystals calculated from these formu-  
las. The authors discuss the angular correlation and momentum distribution for

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centers of gravity of electron-positron pairs in the two-quantum annihilation process. A comparison of theoretical data for lifetimes with the experimentally observed values shows that annihilation of positrons from bound states in quasi-atomic systems of the positron-anion type should contribute a short-lived component of  $\tau_1 \sim 2 \cdot 10^{-10}$  sec. These data also confirm the possibility of a still shorter component in annihilation of positrons from ground states with a lifetime of  $\tau_0 \sim 10^{-11}$  sec. This hypothesis is also confirmed by the calculated half-width of the angular correlation and by maximum momenta for the centers of gravity of annihilating pairs.

Orig. art. has: 1 figure, 4 tables, 37 formulas.

SUB CODE: 20/

SUBM DATE: 13Nov64/

ORIG REF: 013/

OTH REF: 012

Card 2/2 RB

L 31176-66 EWT(1)/T IJP(c) GG  
ACC NR: AP6006831

SOURCE CODE: UR/0181/66/008/002/0464/0466

34  
B

AUTHOR: Prokop'yev, Ye. P.

ORG: Physicochemical Institute im. L. Ya. Karpov, Moscow (Fiziko-khimicheskiy  
institut)

TITLE: Use of the annihilation method for characteristics of polaron states in  
ionic crystals 21.01.65

SOURCE: Fizika tverdogo tela, v. 8, no. 2, 1966, 464-466

TOPIC TAGS: positron, ionic crystal, particle annihilation, polaron

ABSTRACT: The author proposes the positron annihilation method for calculating the characteristics for polaron states (e. g. calculating the effective mass and effective radius of polarons). It is shown that this method may be successfully used if the experimental lifetimes of the positrons are known. A table is given showing effective masses and effective radii of polaron states of the positron for various ionic crystals. The method may be further refined by using the many-electron polaron theory. Orig. art. has: 1 table, 10 formulas.

SUB CODE: 20/ SUBM DATE: 17Jul65/ ORIG REF: 004/ CTH REF: 001

Card 1/1 LC

GOL'DANSKIY, V.I.; IVANOVA, A.V.; PROKOP'YEV, Ye.P.

Anihilation of positrons in alkali metal hydrides. Zhur. ekspl. i teor.  
fiz. 47 no.2:659-666 Ag '64. (MIRA 17:10)

1. Institut khimicheskoy fiziki AN SSSR.

L 52950-65 EWT(m)/EPF(c)/ESP(t)/EMP(b)/EWA (m)-2  
ACCESSION NR: AP5010512

Pr-4/Peb IJP(c) JD JG  
UR/0056/65/048/004/1155/1158

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2-2

6

AUTHOR: Ivanova, A. V.; Prokop'yev, Ye. P.

TITLE: Annihilation of slow positrons in alkali-met-

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 4, 1965,

1155-1158

TOPIC TAGS: positronium hydride, slow positron, positron annihilation, excited state, lifetime, two photon annihilation

ABSTRACT: This is a continuation of earlier work by the authors (with V. I. Gol'-  
ZhETF v. 47, 659, 1964), where it was shown that the system  $e^+H$  has a

else. The calculated mean value of the lifetime for these levels is

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satisfactorily with the experimental value of the long-lived component,  $(1.52 \pm 0.8) \times 10^{-9}$  sec. Curves are presented of the angular correlation of the  $\gamma$  quanta from these levels. The results are com-

165, 1953). Orig. art. has: 2 figures, 1 table, some diagrams.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 05Nov64

ENCL: 00

SUB CODE: NP

MR REF Sov: 002

OTHER: 003

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Card 2/2

KAPLUNOV, Rodion Pavlovich, professor, doktor; PROKOP'YEV, Yevgeniy  
Petrovich, professor, doktor; STARIKOV, Nikolay Antonovich,  
professor, doktor; BRICHKIN, Aleksandr Vasil'yevich, professor,  
doktor; MALAKHOV, G.M., professor, doktor, retsenzent; STRESHENKO,  
A.I., retsenzent; MEDIN, V.V., professor, doktor, retsenzent;  
MARTYNOV, V.K., kandidat tekhnicheskikh nauk, retsenzent; ARSHENT'-  
YEV, A.I., kandidat tekhnicheskikh nauk, retsenzent; KULIKOV, V.V.,  
kandidat tekhnicheskikh nauk, retsenzent; DEMIN, N.S., doktor tekhnicheskikh nauk, retsenzent; TARASOV, L.Ya., redaktor; PARTSEVSKIY, V.N.,  
redaktor; BEKKER, O.G., tekhnicheskiy redaktor

[Underground workings of ores and deposits] Podzemnaia razrabotka  
rudnykh i rossyapnykh mestorozhdenii. Moskva, Gos.nauchno-tekhn. izd-  
vo lit-fy po chernoi i tsvetnoi metallurgii, 1955. 680 p.  
(Mining engineering) (MLRA 9:3)

PROKOP'YEVA, A.; BEREZHNAIA, A.; BATUYEVA, G.

Made of local raw materials. NTO no.9:17 6 '59.  
(MIRA 13:1)

1. Chleny Nauchno-tehnicheskogo obshchestva Verkh-Ietskogo  
metallurgicheskogo zavoda.  
(Ural Mountain region--Kaolin)